



FACT SHEET #1:

Health Impacts of Particulate Air Pollution

Particulate air pollution is a mixture of dirt, soil dust, pollens, molds, ashes, soot and aerosols that remain suspended in the air that we breathe. Coarse particles such as soil dust under 10 microns in diameter (PM_{10}) are caused by human activities such as construction and earthmoving, vehicles driving on paved and unpaved roads, and agricultural tilling and harvesting. Fine particles, measuring less than 2.5 microns ($PM_{2.5}$), are produced primarily by the exhaust from diesel and gasoline engines and other combustion processes.

Particulate air pollution can be harmful to your health. When inhaled, the coarse particles are deposited in the upper respiratory tract of the body. The fine particles can reach the lower pulmonary tissues and invade the alveoli of the lungs. Those at greatest risk from exposure to particulate air pollution are the very young, the elderly, and those with pre-existing heart disease or lung ailments, such as asthma, bronchitis, or emphysema.

In 1995 the Arizona Comparative Environmental Risk Project reported that nearly 1,000 Arizonans die prematurely each year due to particulate air pollution. The Project concluded that particulate air pollution represents one of the highest environmental risks to this State. Fine particulates also contribute to the ugly brown cloud that hangs over the Valley and obscures our blue skies.